

1. (AMENDED) A peptide represented by the formula:  
 $X^1\text{-Arg-Pro-Arg-X}^2\text{-Ser-His- } X^3\text{-Gly-Pro-X}^4\text{-X}^5$

wherein  $X^1$  represents a hydrogen atom or an amino acid residue comprising 1 to 25 amino acids each of which, whether identical or not, has a side chain which may be substituted, or a peptide chain;

$X^2$  represents a neutral amino acid residue having a side chain which may be substituted;

$X^3$  represents a neutral amino acid residue having a side chain which may be substituted, an aromatic amino acid residue having a side chain which may be substituted or a basic amino acid residue having a side chain which may be substituted;

$X^4$  represents a bond or a neutral or aromatic amino acid residue having a side chain which may be substituted;

$X^5$  represents ① an amino acid residue having a side chain which may be substituted or an amino acid derivative with the C-terminal carboxyl group reduced to a hydroxymethyl group or a formyl group, ② a hydroxyl group or ③ a dipeptide chain comprising an amino acid residue having a side chain which may be substituted and an amino acid residue having a side chain which may be substituted, bound together, or a peptide derivative with the C-terminal carboxyl group reduced to a hydroxymethyl group or a formyl group; and a side chain in each amino acid residue in -Arg-Pro-Arg-, -Ser-His- or -Gly-Pro- in the formula may be substituted;

except the case where  $X^2$  represents Leu,  $X^3$  represents Lys,  $X^4$  represents Met,  $X^5$  represents ① Pro or ② Pro-Phe, and -Arg-Pro-Arg- in the formula represents unsubstituted -Arg-Pro-Arg-, -Ser-His- represents unsubstituted -Ser-His-, and -Gly-Pro- represents unsubstituted -Gly-Pro-, or an ester thereof, or a salt thereof

and said peptide has an amino acid sequence selected from the group consisting of SEQ ID NO:3-21, 25 and 28-40.

2. (ORIGINAL) A peptide, as claimed in claim 1, wherein  $X^1$  is an amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

3. (ORIGINAL) A peptide as claimed in claim 1, wherein  $X^1$  is pGlu which may be substituted or Gln having a side chain which may be substituted, or an ester thereof or a salt thereof.

4. (ORIGINAL) A peptide as claimed in claim 1, wherein  $X^1$  is represented by the formula  $Y^1-Y^2$  (wherein  $Y^1$  represents an amino acid residue comprising 1 to 17 amino acids each of which, whether identical or not, has a side chain which may be substituted, or a peptide chain, and  $Y^2$  represents an amino acid residue comprising 1 to 8 amino acids each of which, whether identical or not, has a side chain which may be substituted, or a peptide chain), or an ester thereof or a salt thereof.

A<sup>2</sup>  
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5. (AMENDED) A peptide as claimed in claim 4, wherein  $Y^2$  is a peptide chain represented by ① the formula  $B^1-B^2-B^3-B^4-B^5-B^6-B^7-B^8$ ; ~~wherein each of  $B^1$  through  $B^8$ , whether identical or not, represents an amino acid residue having a side chain which may be substituted~~, ② the formula  $B^2-B^3-B^4-B^5-B^6-B^7-B^8$ ; ~~wherein the symbols have the same definitions as those given above~~, ③ the formula  $B^3-B^4-B^5-B^6-B^7-B^8$ ; ~~wherein the symbols have the same definitions as those given above~~, ④ the formula  $B^4-B^5-B^6-B^7-B^8$ ; ~~wherein the symbols have the same definitions as those given above~~, ⑤ the formula  $B^5-B^6-B^7-B^8$ ; ~~wherein the symbols have the same definitions as those given above~~, ⑥ the formula  $B^6-B^7-B^8$ ; ~~wherein the symbols have the same definitions as those given above~~, ⑦ the formula  $B^7-B^8$ ; ~~wherein the symbols have the same definitions as those given above~~, or ⑧ the formula  $B^8$ ; ~~wherein  $B^8$  has the same definition as that given above~~, or an

ester thereof or a salt thereof.

6. (ORIGINAL) A peptide as claimed in claim 5, wherein B<sup>1</sup> is a neutral amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

7. (ORIGINAL) peptide as claimed in claim 6, wherein B<sup>1</sup> is Gly which may be substituted, or an ester thereof or a salt thereof.

8. (ORIGINAL) A peptide as claimed in claim 5, wherein each of B<sup>2</sup>, B<sup>3</sup> and B<sup>4</sup>, whether identical or not, is a basic amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

9. (ORIGINAL) A peptide as claimed in claim 5, wherein B<sup>5</sup> is an amino acid residue having an aromatic side chain, or an ester thereof or a salt thereof.

10. (ORIGINAL) A peptide as claimed in claim 5, wherein each of B<sup>6</sup> and B<sup>7</sup>, whether identical or not, is a basic amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

11. (ORIGINAL) A peptide as claimed in claim 5, wherein B<sup>8</sup> is Gln having a side chain which may be substituted, or an ester thereof or a salt thereof.

12. (AMENDED) A peptide as claimed in claim 4, wherein Y<sup>1</sup> is an amino acid residue or peptide chain represented by (a) the formula A<sup>1</sup>-A<sup>2</sup>-A<sup>3</sup>-A<sup>4</sup>-A<sup>5</sup>-A<sup>6</sup>-A<sup>7</sup>-A<sup>8</sup>-A<sup>9</sup>-A<sup>10</sup>-A<sup>11</sup>-A<sup>12</sup>-A<sup>13</sup>-A<sup>14</sup>-A<sup>15</sup>-A<sup>16</sup>-A<sup>17</sup> wherein each of A<sup>1</sup> to A<sup>17</sup>, whether identical or not, represents an amino acid residue having a side chain which may be substituted, (b) the formula A<sup>2</sup>-A<sup>3</sup>-A<sup>4</sup>-A<sup>5</sup>-A<sup>6</sup>-A<sup>7</sup>-A<sup>8</sup>-A<sup>9</sup>-A<sup>10</sup>-A<sup>11</sup>-A<sup>12</sup>-A<sup>13</sup>-A<sup>14</sup>-A<sup>15</sup>-A<sup>16</sup>-A<sup>17</sup> wherein the symbols have the same definitions as those given above, (c) the formula A<sup>3</sup>-A<sup>4</sup>-A<sup>5</sup>-A<sup>6</sup>-A<sup>7</sup>-A<sup>8</sup>-A<sup>9</sup>-A<sup>10</sup>-A<sup>11</sup>-A<sup>12</sup>-A<sup>13</sup>-A<sup>14</sup>-A<sup>15</sup>-A<sup>16</sup>-A<sup>17</sup> wherein the symbols have the same definitions

as those given above), (d) the formula  $A^4-A^5-A^6-A^7-A^8-A^9-A^{10}-A^{11}-A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$  wherein the symbols have the same definitions as those given above), (e) the formula  $A^5-A^6-A^7-A^8-A^9-A^{10}-A^{11}-A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$  wherein each symbols have the same definitions as those given above), (f) the formula  $A^6-A^7-A^8-A^9-A^{10}-A^{11}-A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$  wherein the symbols have the same definitions as those given above), (g) the formula  $A^7-A^8-A^9-A^{10}-A^{11}-A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$  wherein the symbols have the same definitions as those given above), (h) the formula  $A^8-A^9-A^{10}-A^{11}-A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$  wherein the symbols have the same definitions as those given above), (i) the formula  $A^9-A^{10}-A^{11}-A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$  wherein the symbols have the same definitions as those given above), (j) the formula  $A^{10}-A^{11}-A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$  wherein the symbols have the same definitions as those given above), (k) the formula  $A^{11}-A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$  wherein the symbols have the same definitions as those given above), (l) the formula  $A^{12}-A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$  wherein the symbols have the same definitions as those given above), (m) the formula  $A^{13}-A^{14}-A^{15}-A^{16}-A^{17}$  wherein the symbols have the same definitions as those given above), (n) the formula  $A^{14}-A^{15}-A^{16}-A^{17}$  wherein the symbols have the same definitions as those given above), (o) the formula  $A^{15}-A^{16}-A^{17}$  (wherein the symbols have the same definitions as those given above), (p) the formula  $A^{16}-A^{17}$  wherein the symbols have the same definitions as those given above), or (q)  $A^{17}$  wherein  $A^{17}$  has the same definition as that given above), or an ester thereof or a salt thereof.

13. (ORIGINAL) An amino acid residue or peptide as claimed in claim 12, wherein  $A^1$  is an amino acid residue having an aromatic side chain, or an ester thereof or a salt thereof.

14. (ORIGINAL) A peptide as claimed in claim 12, wherein  $A^2$  and  $A^3$  are neutral amino acid residues having a side chain which may be substituted, or an ester thereof or a salt thereof.

15. (ORIGINAL) A peptide as claimed in claim 12, wherein A<sup>4</sup> is a neutral or a basic L-amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

16. (ORIGINAL) peptide as claimed in claim 12, wherein A<sup>5</sup> is Pro having a side chain which may be substituted, or an ester thereof or a salt thereof.

17. (ORIGINAL) A peptide as claimed in claim 12, wherein each of A<sup>6</sup> and A<sup>9</sup>, whether identical or not, is a basic amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

18. (ORIGINAL) A peptide as claimed in claim 12, wherein each of A<sup>7</sup> and A<sup>10</sup>, whether identical or not, is an amino acid residue having a hydroxy group in a side chain thereof or a neutral amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

19. (ORIGINAL) A peptide as claimed in claim 12, wherein A<sup>8</sup> is an amino acid residue having a hydroxy group in a side chain thereof, or an ester thereof or a salt thereof.

20. (ORIGINAL) A peptide as claimed in claim 12, wherein A<sup>8</sup> is Ser, Pro or Hyp, or an ester thereof or a salt thereof.

21. (ORIGINAL) A peptide as claimed in claim 12, wherein A<sup>10</sup> is an amino acid residue having a hydroxy group in a side chain thereof, or an ester thereof or a salt thereof.

22. (ORIGINAL) A peptide as claimed in claim 12, wherein A<sup>11</sup> through A<sup>14</sup>, whether identical or not, is a neutral amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

23. (ORIGINAL) A peptide as claimed in claim 12, wherein A<sup>15</sup> is an amino acid residue having an aromatic side chain, or an ester thereof or a salt thereof.

24. (ORIGINAL) A peptide as claimed in claim 23, wherein A<sup>15</sup> is Trp, or an ester thereof or a salt thereof.

25. (ORIGINAL) An amino acid residue or peptide as claimed in claim 12, wherein each of A<sup>16</sup> and A<sup>17</sup>, whether identical or not, represents a neutral amino acid residue having a side chain which may be substituted, or an ester thereof or a salt thereof.

26. (AMENDED) A pharmaceutical containing a peptide, as claimed in claim 1, or an ester thereof or a salt thereof and a pharmaceutically acceptable carrier, excipient or diluent.

a<sup>2</sup>  
27. (ORIGINAL) A pharmaceutical as claimed in claim 26 which is a central nervous function regulator, a circulatory function regulator, a cardiac function regulator, an immune function regulator, a digestive function regulator, a metabolic function regulator or a reproductive organ function regulator.

28. (ORIGINAL) A pharmaceutical as claimed in claim 26 which is an agonist of a protein containing an amino acid sequence shown by Sequence ID No.:26 or a salt thereof.

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